this composition, the molecules of air transmitting heat from the high temperature side to the low temperature side is extremely small. As the insulating core 105, silica powder is used. The silica powder has a thermal conductivity of about 10 W/m-K at 25°C and atmospheric pressure 760 Torr (mmHg). Therefore, the thermal conductivity at atmospheric pressure is smaller than that of glass fiber. Hence, if the degree of vacuum drops in the laminate bag, the degree of decline of insulating performance is small. Therefore, the heat insulation is maintained for a long period. As a result, the vacuum heat insulator can be used for a long period.

In the conventional vacuum heat insulator using polyethylene terephthalate or other plastic film, when the vacuum heat insulator is used at temperature of about 85°C, the support layer 103 supporting the deposition layer 102 expands or shrinks thermally. As a result, due to difference in coefficient of thermal expansion between the support layer 103 and deposition layer 102, cracks are formed in the deposition material forming the deposition layer 102. In the embodiment, by contrast, as the support layer 103 for supporting the deposition layer 102, polyphenylene sulfide with glass transition point of 87°C, or the polyethylene naphthalate with glass transition point of 121°C is used. Accordingly, when used at high temperature of about 85°C, the degree of thermal expansion or shrinkage of the support layer 103 is very small. Therefore, cracking of the deposition layer 102 is prevented. As a result, the deposition material forming the deposition layer 102 maintains the role of preventing change of degree of vacuum as